

Division of Environmental Health Office of Radiation Protection

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The Division of Environmental Health licenses, certifications, and permits

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Commercial Low Level Radioactive Waste Disposal

The Waste Management Section issues the commercial site licenses for the receipt and disposal of low-level and naturally occurring and accelerator produced radioactive material.



- Waste Disposal
- <u>History</u>
- Fact Sheet
- Current Operating License (2413.29 KB PDF)
- Naturally-Occurring and Accelerator-Produced Radioactive Materials (NARM)
- Final Environmental Impact Statement for the Commercial Low-Level Radioactive Waste Disposal Site; August 2004
- <u>US Ecology</u>
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Background

<u>US Ecology</u> operates the commercial low-level radioactive waste disposal site located in Eastern Washington.

The site has received about 14 million cubic feet of radioactive waste that contains about 4 million curies. The remaining capacity of the facility is approximately 44 million cubic feet. Annual disposal volumes have varied greatly. Prior to the Northwest Compact Agreement, the commercial site had several years where it received over 1 million cubic feet per year of low-level radioactive waste for disposal. In 2006, volumes for low-level waste are expected to be less than 50,000 cubic feet.

Waste Disposal



A Department of Health inspector examines each shipment of waste prior to disposal in the trench. Each shipment is checked for compliance with requirements and regulations of the U.S. Department of Transportation, U.S. Nuclear Regulatory Commission, and the state of Washington, as well as the site operators license. Packages are randomly selected and opened to ensure contents comply with all requirements.

Waste is generally packaged in metal drums or metal boxes, and is usually put directly into the trenches. It is classified as A, B, or C. U.S. Nuclear Regulatory Commission (USNRC) regulation 10 CFR 61 went into effect on December 27, 1983. Part 61 requires that all low-level radioactive waste be classified based upon mobility, half-life, and radiological hazard. Class A waste has the lowest concentration of radionuclides and must meet only the minimal waste form requirements. Approximately 95 percent of the waste received at the disposal facility is Class A.

Class B and C contain higher concentrations and must meet both the minimum and stability waste form requirements. Class C waste must also be disposed by methods that provide additional protection against inadvertent intruders.

Stability of Class B and C wastes can be provided by the waste form itself, processing the waste to a stable form or placing the waste in containers that provide stability. To the extent possible, Class B and C waste forms must retain their gross physical properties and identity for a minimum of 300 years under expected disposal conditions. In practice, stability is achieved by the use of high integrity containers (HIC), Engineered Concrete Barriers (ECB), or media that has proven to meet the requirements set forth by the USNRC. Both HIC's and stabilization media must pass tests that have been prescribed by the USNRC.

External Links

- International Atomic Energy Agency
- Radiation/Health Links
- U.S. Department of Energy
- U.S. Environmental Protection Agency
- U.S. Nuclear Regulatory Commission
- Washington State, Department Of Ecology, Nuclear Waste Program

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health.

Contact Information

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